Remarks

Claims 1-3 and 5-11, 35, and 36 were pending; claims 1 and 6 are amended herein; claims 35 and 36 are canceled, and new claims 37 is added. As a result, claims 1-3, 5-11, and 37 are now pending.

The amendments to the claims are supported throughout the specification. Amended claim 1 is supported, e.g., by originally filed claims 1, 5-9, and 27; and at page 9, lines 16-17; FIG. 5(C); page 2, line 10; and page 26, line 21. Amended claim 6 is supported, e.g., by originally filed claim 6. New claim 37 is supported, e.g., by originally filed claim 1.

The amendment to paragraph 20 in the specification is supported by the originally filed paragraph 20.

The amendment to paragraph 91 of the specification is supported at Table 2A on page 34 and by the originally filed sequence listing and SEQ ID NOS: 8 and 10 therein.

Objections to the Claims

The Examiner maintained the objection in the Office Action mailed February 15, 2006, to claim 1 (part b) as drawn to non-elected inventions. This objection is respectfully traversed.

A restriction/election requirement in this application was mailed July 13, 2005, in this application. This objection is based on that restriction/election requirement.

In a telephonic conference between the Examiner, Examiner Susan Ungar, and Applicants' attorney on August 8, 2006, and in the follow-up telephone call from Examiner Reddig to Applicants' attorney on August 11, 2006, it was agreed that the portion of the restriction/election requirement requiring election of one multiple repeat domain corresponding to one linear sequence identifier upon election of Group III would be treated as an election of species requirement under 37 C.F.R. § 1.146, and that amendment of paragraph (b) of claim 1 as it is amended herein would overcome the objection to claim 1 and would satisfy the election of species requirement in this application.

The Examiner objected to claim 5 as referring to non-elected subject matter. But the Examiner wrote that amendment of claim 1 to overcome the objection to claim 1

would obviate this objection. Applicants believe therefore that the amendment to claim 1 obviates the objection to claim 5.

Objections to the Specification

The Examiner objected to the addition of the phrase "at least in part" to paragraph 20 in an amendment. The phrase has been deleted from paragraph 20 in this paper, restoring paragraph 20 to the originally filed language. This obviates the objection.

The Examiner objected to page 19, lines 27 and 28 for improper disclosure of amino acid sequences without a sequence identifier. The specification is amended herein to add the sequence identifiers after these sequences, obviating this objection.

Claim Rejections Maintained

Claim 6 was rejected under 35 U.S.C. § 112, first paragraph, on the basis that the specification allegedly does not contain a written description of the claimed invention. This rejection is respectfully traversed.

The Examiner stated that the phrase "epitope binding sites that are located <u>at least in part</u> in the C-enclosure" has no clear support in the specification and claims as originally filed. The phrase "at least in part" has been deleted from claim 6 herein, obviating this rejection.

The Rejection of the Claims under 35 U.S.C. § 101

Claims 1-3, 5-11, 35, and 36 were rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter. This rejection is respectfully traversed.

Claim 1 is amended herein to recite "A <u>purified</u> CA125 molecule." Applicants believe this obviates the rejection. Withdrawal of this rejection of the claims is respectfully requested.

The Rejection of the Claims Under 35 U.S.C. § 112, Second Paragraph

Claims 1-3, 5-11, 35, and 36 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the

subject matter applicant regards as the invention. This rejection is respectfully traversed insofar as it may apply to the amended claims.

The claims were alleged to be indefinite for reciting a CA125 molecule comprising genomic exons that comprise amino acids, because genomic exons comprise nucleic acid residues and not amino acid residues. Claim 1 has been amended to delete reference to exons. Applicants believe that this obviates the rejection.

Accordingly, Applicants respectfully request withdrawal of the rejection of claims 1-3, 5-11, 35, and 36 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter applicant regards as the invention.

The Rejection of the Claims Under 35 U.S.C. § 112, First Paragraph

Claims 1-3, 5-11, 35, and 36 were rejected under 35 U.S.C. § 112, first paragraph, as the specification allegedly does not contain a written description requirement of the claimed invention. This rejection is respectfully traversed.

In the telephonic conference with the Examiner, Examiner Susan Ungar, and Applicants' attorney on August 8, 2006, and in the follow-up telephone call from Examiner Reddig to Applicants' attorney on August 11, 2006, it was agreed that amendment of paragraph (b) of claim 1 as it is amended herein would overcome the objection to claim 1 and would satisfy the restriction/election requirement in this application. In the restriction/election requirement, the Examiner required Applicants to elect one sequence of multiple repeat unit within the multiple repeat domain for prosecution on the merits. Applicants elected SEQ ID NO:150. There is clear support for SEQ ID NO:150 being a repeat unit found in the multiple repeat domain in the specification, e.g., in the sequence listing, in claims 5-9, and at page 9, lines 16-17. Thus, claims 1-3, 5-11, and 37 satisfy the written description requirement.

Amending claim 1 to recite SEQ ID NO:150 was done only to satisfy the restriction/election requirement and the objection to claim 1, since the Examiner refused to examine the originally filed claim 1 on the merits without amendment of claim 1, part b, to recite one sequence of multiple repeat unit. SEQ ID NO:150 is clearly one of the sequences of multiple repeat unit disclosed in the specification. For instance, page 9,

lines 16-17, states "[Figure 3] Panel C shows a typical repeat sequence corresponding to SEQ ID NO: 150." Likewise, claims 6-9 recite and refer to SEQ ID NO: 150 as an exemplary repeat unit in the multiple repeat domain. If there were not support for amending claim 1 to recite a multiple repeat domain comprising SEQ ID NO:150, then there is no basis for the election of species requirement and Applicants contend that the Examiner must withdraw the election of species requirement and examine claim 1 as originally filed on the merits without the recitation of any single multiple repeat unit sequence.

Accordingly, Applicants respectfully request withdrawal of the rejection of claims 1-3, 5-11, 35, and 36 under 35 U.S.C. § 112, first paragraph as failing to satisfy the written description requirement. In the alternative, if the Examiner maintains this rejection, Applicants respectfully request withdrawal of the election of species requirement and of the objection to claim 1, and request an invitation to amend claim 1 to its originally filed form and a pledge to examine the originally filed claim 1 on the merits.

The Rejections of Claims 35 and 36

Claims 35 and 36 were rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement, in section 11 of the Office Action. Claims 35 and 36 were rejected under 35 U.S.C. 112, second paragraph, on the basis that the specification allegedly does not contain a written description of the claimed invention, in sections 12 and 13 of the Office Action. These rejections are respectfully traversed.

Claims 35 and 36 are canceled herein, obviating these rejections.

Serial No. 09/965,738

Conclusion

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (651-207-8270) to facilitate prosecution of this application.

Respectfully submitted,

TIMOTHY J. O'BRIEN ET AL.

By their Representatives,

McTavish Patent Firm 429 Birchwood Courts Birchwood, MN 55110 651-207-8270

Date Aug. 21, 2506

By: Ough Milhon

Hugh McTavish Reg. No. 48,341

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient first class postage, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 2 day of August 2006.

Hugh McTavish